DISPLAY

CLR/ON/OFF This button turns the unit on and off, and clears any function of the display. It also stops the beep from sounding.

UP When in the Temperature mode, this button will raise the preset temperature (button must be pressed for two seconds before change occurs). These changes will remain in the memory permanently, or until they are changed.

When in Time or Boiling mode, this button increases the preset time (button must be held for two seconds before change occurs). These changes will remain in the memory permanently, or until they are changed.

DOWN When in the Temperature, Time or Boiling mode, this button decreases the preset time. See up for further detailed instructions.

UP & DOWN When both buttons are pressed at the same time while in the Temperature mode, the preset temperature appears in the display.

BOIL This button activates the automatic liquefaction cycle. Both LED lights turn on and the display flashes the preset time (10 minutes unless manually modified). When the water reaches the boiling temperature, the timer begins counting down to 000. It will then flash and beep for 10 seconds. To stop the liquefaction cycle, press BOIL or CLR/ON/OFF.
Boil can only be activated in the left compartment.

TIMER This button starts the timer which has a preset time of five minutes in memory (it can be manually changed by using the Up or Down buttons). The timer will count down to 000, flash and beep for two seconds, then return to the previous mode (Temperature or OFF).

TIMER LED This indicates that the display is registering the Time mode.

TEMPERATURE LED This indicates that the display is in the Temperature mode.

LIQUEFY LED When both LED's are lit, the display is indicating that the liquefaction cycle is in operation and will start its countdown when the water starts boiling. Note: Time above 10 minutes reads in minutes only; time below 10 minutes reads in minutes and seconds.

CARE AND CLEANING

1. For general cleaning use ordinary soap or detergent and warm water.

2. To clean the water tanks, remove the electronic modules and empty the water. Add a solution of vinegar and water to the tank and let stand for 30 minutes. A soft non-abrasive scrub pad will generally remove any residual deposits.

3. To clean the heating elements, remove the module and slide a plastic bag around the plastic case, leaving the heating element exposed. Commercial cleaners available will generally remove the scale. Spray the cleaner onto the exposed metal parts and allow to soak for a few minutes. Very carefully rinse the exposed heating element, take care to avoid getting any water on the plastic case. A soft non-abrasive scrub pad can be used to loosen any stubborn area. Use caution when cleaning the small stainless steel rod on the left of the heating element. Do not move the rod, as any sudden pressure could crack the plastic case and cause a faulty low-water signal.

4. The B-Tron can be disinfected with a surface concentration of bleach and water. See "Instructions to Prepare Hydrocolloid" sheet for Impression Disinfection.

ADDITIONAL INFORMATION

There is No Power to Any of the Modules.

A) Check the main power switch which is located in the back of the chassis. (Lower right corner as the unit faces you). Make sure it is on.
B) Check the fuses located on the back of the chassis on the aluminum base.
C) Check the main circuit breaker to the wall outlet.

There is Power to One Module.

A) Check the fuse to that module on the back of the chassis on the aluminum base. The best way to check the fuse is to exchange it with a new fuse.
B) Unplug the unit. Remove the module from the chassis. Look down inside the chassis. Toward the bottom of the base attached to the side of the outer tank is a round device with two wires attached and a small red button in the center. This is the thermal circuit breaker. Reach down and press in on the button. Insert the module and plug the unit back in. Note: If the thermal circuit breaker opens when the unit is very hot, it will not reset immediately. The device must cool down at least 40° before it will reset.

Modules Beep and Flash H20.
If you are using distilled water you must add some electrolyte to the water. If you do not have Dux (Van R) Electrolytic Freshener, add a teaspoon of table salt, potassium sulfate, or 2-3 ounces of tap water.

One Module Beeps and Flashes H20.
Check the area on the plastic module case, where the small stainless steel rod on the left of the heating element enters the case. If there are any small cracks in the plastic that will cause the beeping. Return the module to the factory to have a new case installed.

Module Beeps Rapidly During boil cycle.
Moisture has entered the base contact area. Turn machine off and remove the module. Blow air on the silver contacts in the base. Carefully dry the silver contacts on the bottom of the module.

INSTRUCTIONS FOR USE - DUX DENTAL (VAN R) REVERSIBLE HYDROCOLLOID MATERIALS

(Hydrocolloid, Wash, Cartiloid, Supercartiloid, Backloading syringe)

HYDROCOLLOIDS

1. Material Preparation
Material preparation should be done on a weekly basis. At the start of each work week, select enough material to last through the week. Tighten the caps of the poly tubes and place them, cap down, into the left (Liquefying) bath of the hydroprocessor.
Place the Hydrocolloid, Wash-, (Super)CartriLoid materials, or backloading syringes, into the boiling bath with the plastic caps, rubber plugs, or needle assemblies down.
Storage is limited to five days at 65°C.

2. Liquefaction
After the materials are in place, fill left ("liquefying") bath with tap water until the level is one half inch below the "filled" line. This procedure will allow the water to reach an active boil and not overflow the tank or interrupt the electronic operations. All VanR Reversible Hydrocolloid materials must experience a ten minute active boil.
Review the instructions of your hydroprocessor or conditioner to complete this procedure.

NOTE: Special liquefaction instructions apply to high elevations. Please call The Answer Line for your specific situation.

3. Storage
After the ten minute liquefaction cycle, transfer all materials to the center ("storage") bath. This bath is maintained at 65°C. After ten minutes, the material is available for use, and will remain usable throughout the work week.

NOTE: Recommended Disinfection Procedure Before Impression Making:
To virtually eliminate any chance of cross contamination when sizing trays, place the impression tray in a plastic bag before it is "tried" in the mouth. After the appropriate size has been determined, discard the plastic bag and proceed with the impression making. Be sure to indicate the appropriate tray size on the patient's chart to eliminate future try-ins.

4. Tempering
Fill the tray with the hydrocolloid material by placing the nozzle of the poly tube in the anterior region of the tray and mounding the material. As the material fills the tray, gently smooth it to and under the rim lock with a gloved, wet finger. This will secure the material in the tray. Place the filled tray into the right (Tempering) bath adjusted to 43°C. This procedure reduces the temperature and builds body.

NOTE: A more fluid material is necessary for removable partial impressions. Tempering times should be reduced to three minutes.

5. Gelation
Attach tubing, seat the tray in the mouth and initiate gelling of the material by circulating room temperature water through the tray for five minutes (or seven minutes with Acculoid).

6. Removal
The tray should be removed with a deliberate snap. Avoid rocking and twisting.

7. Disinfection/Pouring
Recommended disinfection procedure after tray removal:

- Remove, rinse and disinfect the hydrocolloid material.
  A. Select and prepare a fresh solution of one of the following disinfectants, according to the manufacturers' instructions. Choose from the following (and carefully follow the manufacturer's label instructions for exact mixing ratios): 1:213 iodophor or 1:10 sodium hypochlorite 1:2.
  B. Upon removal from the mouth, rinse the impression under gently running, room temperature tap water for thirty seconds.
  C. Submerge the impression in the disinfectant solution of choice for up to thirty minutes.
  D. Remove the impression, rinse it once again under room temperature tap water for thirty seconds.
  E. Pour as usual.

8. Re-liquefaction
Should unused material remain at the close of the work week, remove it from the storage bath and allow it to solidify at room temperature. It may be reliquefied in a subsequent cycle; be sure to add 2 minutes (Do not reboil for more than 3 times).
It is advisable to identify previously boiled material in order that it be used prior to newer material

CE

DECLARATION OF CONFORMITY

The Company Dux B.V., Zonnebaan 14, Holland, declares under its own responsibility that the products listed below, to which this declaration refers, comply with the following directives:

- Council Directive 89/336 on the approximation of the laws of the ECC Member States relating to electromagnetic compatibility.

15517	ß-Tron 301 Hydroprocessor
15526	ß-Tron 201 Hydroprocessor
15535	ß-Tron 101 Hydroprocessor
15555	ß-Tron plug-in electronic module

DUX DENTAL
ZONNEBAAN 14 • NL-3542 EC UTRECHT • HOLLAND
☎ +31-30-2410 924 • FAX +31-30-2410 054 • e-mail: dux@duxbv.nl

vers.02/08U

Owners manual & Operating Instructions

ß-Tron Hydroprocessor

DUX DENTAL

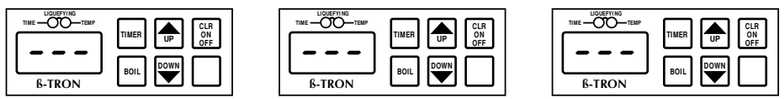
EXCLUSIVE FEATURES

Many exclusive features have been built into the Dux (Van R) ß-Tron Hydroprocessor. They include:

1. DIGITAL DISPLAYS:
   - A Preset temperatures in the baths.
   - B Actual temperature in the bath is accurate to 0.1° .
   - C Adjustable, automatic timer (audible signal).
   - D Automatic countdown for liquefying procedure.
   - E Alpha display for OFF, Power Failure, and Low Water indicators.
   - F Small indicator light identifying Time mode, Temperature mode, and Liquefaction mode.
2. Automatic Liquefaction eliminates the need to estimate length of time required to reach boiling temperature. The B-Tron is programmed to do it automatically.
3. Microcomputers.
4. Solid State Circuitry.
5. Programmed Temperature Control anticipates and stabilizes temperatures.
6. Extra-wide water compartments for the larger trays.
7. Immersion-type heaters for quicker temperature response and economy of operation.
8. Low-water signal, audible warning, and cut-off.

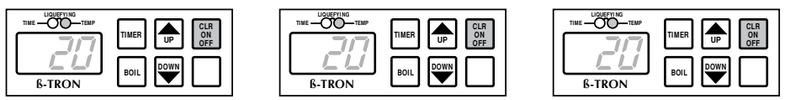
OPERATING INSTRUCTIONS

- Place hydrocolloid material in the left bath, fill that bath with water up to an inch from fill line (to account for the rolling boil).
- Fill center bath with the same amount of water.
- Fill right bath up to fill line.
- Switch on main power switch (located on the back of the unit at the lower left) to activate. The displays will indicate:



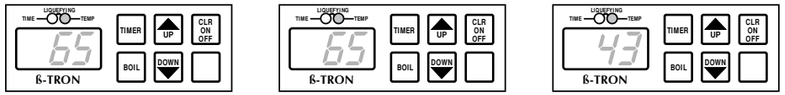
LIQUEFYING **STORAGE** **TEMPERING**

To start, press the CLR/ON/OFF button on each compartment twice. With the first push the display will show "OFF," with the second push the display will show current temperature and begin heating to the preset temperature of each bath. Note: The LED light indicates "Temperature." Should the display indicate "H20", refer to "What if…" section.



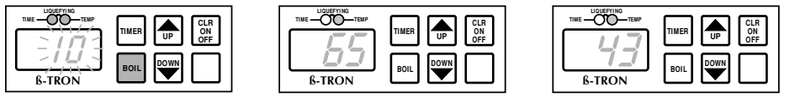
LIQUEFYING **STORAGE** **TEMPERING**

In about 15 minutes the compartments will reach their respective preset temperatures. The left and center (Liquefying and Storage) baths are preset to 65°, and the right (Tempering) bath is preset to 43°.



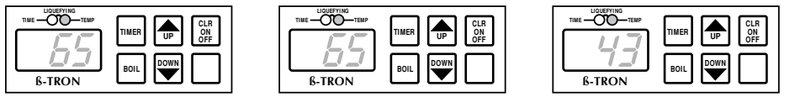
LIQUEFYING **STORAGE** **TEMPERING**

To liquefy the materials, place enough tray and syringe materials (to last a week) into the left bath. Press BOIL. The display will flash the preset time of 10. When the water reaches a boiling temperature, the display will automatically start decreasing until 000 flashes and an audible signal is sounded for 10 seconds. Caution should be utilized when opening the lid to allow steam to escape. Transfer basket to the center (Storage) bath at this time, and refill the left hand bath to the full line. Note: Do not initiate a boil cycle unless the water temperature is 65° or lower because an incomplete boil cycle will result.



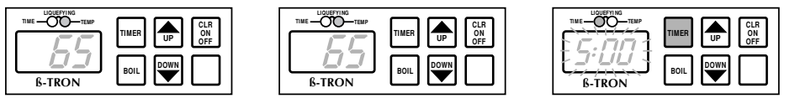
LIQUEFYING **STORAGE** **TEMPERING**

After the liquefying cycle has been completed, the materials should be transferred to the center (Storage) bath.



LIQUEFYING **STORAGE** **TEMPERING**

To temper the tray material, which is necessary before making the impression, extrude the tray material directly into the proper size, water-cooled tray, place into the right (Tempering) bath, and press the Timer button. The preset time of five minutes will appear on the display and start counting down to 000, flash for two seconds with an audible signal, and then return to the preset temperature of 43°. You are now ready to take the impression. The timer button can also be used to time the impression in the mouth.



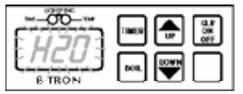
LIQUEFYING **STORAGE** **TEMPERING**

WHAT IF.....

- **LOW WATER INDICATOR FLASHES.**

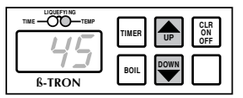
Whenever the water level in any bath becomes too low, the display will indicate H20, the compartment will automatically turn off and sound an audible signal until the proper water level is restored. You may either press the CLR button to turn the alarm off or add the proper amount of water and the alarm will turn off. The display will return to the temperature mode and the water will be heated to the proper temperature.

If H20 continues to display, the water may be too pure, or the sensors may be coated with deposits. Place one teaspoon of Dux (Van R) Electrolytic Freshener in the bath and allow time to dissipate. Salt may be used in an emergency, but continued use of salt will cause corrosion. To remove any deposits follow the cleaning procedures above.

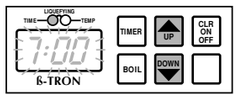


- **YOU WANT TO CHANGE PRESET TEMPERATURE.**

Display must be in Temperature mode (indicated by the LED temperature light). Press either the UP or DOWN button and hold for two seconds. The display will begin to raise or lower to the desired temperature.*



- Display must be in the Time mode (indicated by the LED time light). Press either the UP or DOWN button and hold for two seconds. The display will begin to increase or decrease to the desired time.* Push the CLR and then the TIMER button for any change to take effect.

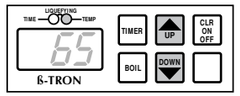


** The new settings will remain in permanent memory until they are again changed. This means the unit can be removed for cleaning without having to reset any functions.*

- **THERE IS A POWER INTERRUPTION.**

The displays will show three flashing bars. If the power was off for less than than 15 minutes, press the CLR button twice to return to temperature mode. It should not be necessary to re-boil the material. If the power was off for a longer period of time, all material should be re-boiled even if the displays indicate the proper water temperatures.

Remember, whenever you see the three flashing bars it means that there has been a power interruption. The unit is either heating or maintaining the proper temperatures.



DISPLAY TERMS

OFF Bath has been turned off by pressing the OFF button on the display panel of that particular compartment.

- - - (Flashing) indicates there had been an interruption in power. The unit will heat in this mode. Check all materials and re-liquefy if necessary.

H2O Modules Beep and Flash H20.
If you are using distilled water you must add some electrolyte to the water. If you do not have Dux (Van R) Electrolytic Freshener, add a teaspoon of table salt,or 70 ml. of tap water.

If H20 continues to display, the water may be too pure, or the sensors may be coated with deposits. Place one teaspoon of Dux (Van R) Electrolytic Freshener in the bath and allow time to dissipate. Salt may be used in an emergency, but continued use of salt will cause corrosion. To remove any deposits follow the cleaning procedures above.

000 Timing cycle has just been completed and an audible signal sounds (audible signal may be silenced by pressing the Timer button or the CLR/ON/OFF button). Display will indicate temperature of the water after boiling and will gradually decrease until the preset temperature (usually 65°, unless manually modified) is reached.